

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

CLEANUP AND ABATEMENT ORDER R5-2012-0706
FOR
NORTHSTATE RECYCLING, A CALIFORNIA CORPORATION,
CLEAR WATER PROPERTIES, LLC, R & L AUTO CRUSHING,
AND
WILLIAM AND LENA SHORT
REDDING, SHASTA COUNTY

This Order is issued to Northstate Recycling; Clear Water Properties, LLC; R & L Auto Crushing; and William and Lena Short (hereafter collectively referred to as “Dischargers”), based on provisions of Water Code section 13304, which authorizes the Central Valley Regional Water Quality Control Board (“Central Valley Water Board,” or “Board”) to issue a Cleanup and Abatement Order (“Order”), and Water Code section 13267, which authorizes the Central Valley Water Board to require the preparation and submittal of technical and monitoring reports.

The Assistant Executive Officer finds, with respect to the Dischargers’ acts, or failure to act, the following:

PROPERTY OWNERSHIP

1. In 1970, Russell Short, Sr. purchased a 12-acre parcel of land at 2041 Girvan Road, Redding, Shasta County, Assessor Parcel Number (APN) 050-500-009-000. In 1973, Russell Short, Sr. began scrap metal recycling operations on the property as Short’s Scrap Iron and Metal, Inc (Short’s). In 2000, Northstate Recycling purchased the Short’s business. Also in 2000, APN 050-500-009-000 was sold to Clear Water Properties, LLC, which currently owns the property.
2. Located directly east of the north half of APN 050-500-009-000 is an approximately 2.3-acre parcel, APN 050-500-021-000, which, according to the Shasta County Tax Assessor’s Office, is owned by R & L Auto Crushing and William R. and Lena D. Short. Currently, Northstate Recycling uses APN 050-500-021-000 for storage of equipment and shredder waste. Together, APN’s 050-500-009-000 and 050-500-021-000 are referred to as the “Site.”
3. The Site is bounded on the north by Girvan Road and a single family residence, on the west by an unnamed tributary to Clear Creek, Union Pacific Railroad tracks and state Highway 273, on the south by an undeveloped parcel and Clear Creek, and the east by R & L Auto Crushing, VSS Emultech, and a residential neighborhood.

BACKGROUND

4. Short’s began scrap metal recycling operations on the Site in 1973. In general, operations have remained relatively unchanged since 1973. Northstate Recycling purchased the business in 2000. Northstate Recycling is a regional recycling facility that receives and processes post-consumer recyclable materials including cardboard, plastic, glass, ferrous metals, and high-value non-ferrous metals. These materials are sorted,

processed, and transferred off-site for sale. Site operations include crushing and baling scrap metals including automobiles and shredding metal appliances. Former operations included a re-melt furnace for processing scrap aluminum, which also generated aluminum ash during the process.

5. In 1997, Short's completed a Preliminary Endangerment Assessment (PEA) to determine whether historic operations had resulted in a release or threatened release of hazardous substances which could pose a threat to public health or the environment. Results of the PEA indicated the presence of hazardous substances in the following areas:
 - a. Two soil stockpiles in the white goods (appliances) area and surface and subsurface soils in the scrap iron storage area containing lead and copper well above STLC thresholds,
 - b. Total petroleum hydrocarbons concentrations exceeding 100 mg/kg were measured in soil samples near the shop sump area, truck parking area, and scrap iron storage area,
 - c. Storm water runoff exiting the Site into Clear Creek contained detectable concentrations of TPH and metals.
6. In October 1997, DTSC approved the PEA and requested Short's enter into a Voluntary Cleanup Action to develop and implement a Removal Action Workplan for the soils contamination. This work was completed in the spring of 1998. On 12 June 1998, DTSC issued a letter confirming completion of the subject work.
7. Northstate Recycling discharges storm water under State Water Resources Control Board Water Quality Order No. 97-03-DWQ, National Pollutant Discharge Elimination System General Permit No. CAS000001, State of California General Industrial Storm Water Permit ("General Permit"). Northstate Recycling filed a Notice of Intent on 24 May 2001 for coverage under the General Permit (5R45I016539).
8. The General Permit requires (a) that storm water discharges not cause or threaten to cause pollution, contamination, or nuisance, (b) that storm water discharges not cause or contribute to a violation of an applicable water quality standard, and (c) that facility operators reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges through the development and implementation of best management practices (BMPs) which constitutes compliance with best available technology economically achievable (BAT) and best conventional pollutant control technology (BCT).
9. US EPA has established benchmark concentrations (Federal Register Volume 65, No. 210, 30 October 2000) as guidelines for determining whether a facility discharging industrial storm water has implemented the requisite BAT and BCT. The following benchmarks have been established for pollutants discharged under the Site's General Permit: pH, 6.0 to 9.0; specific conductance, 200 μ mhos/cm; total suspended solids (TSS), 100 mg/L; oil and grease, 15.0 mg/L; chemical oxygen demand (COD),

120 mg/L; copper, 0.0636 mg/L; lead, 0.0816 mg/L; zinc, 0.117 mg/L; aluminum, 0.75 mg/L; and iron, 1.0 mg/L.

10. Northstate Recycling has a history of non-compliance with conditions of the General Permit. Results from storm water monitoring required by the General Permit show storm water discharges from the facility consistently exceed US EPA benchmark values for most constituents analyzed. On 13 August 2001, 23 August 2002, and 19 August 2004, Central Valley Water Board staff sent Northstate Recycling letters advising them their storm water sample results exceeded the US EPA benchmark values, and requesting they review existing BMPs, modify current BMPs and/or implement new BMPs, and update their Storm Water Pollution Prevention Plan (SWPPP). On 12 July 2006 and 13 August 2007, Central Valley Water Board staff issued Notices of Non-Compliance to Northstate Recycling for failure to submit storm water annual reports.
11. On 25 March 2008, Central Valley Water Board staff issued a Notice of Violation to Northstate Recycling for discharging or threatening to discharge pollutants that may cause pollution, contamination, or nuisance. In response, Northstate Recycling upgraded the facility's storm water treatment system, implemented a variety of additional storm water BMP's, and updated the SWPPP. However, after implementing the upgrades described above, storm water sample results continued to exceed benchmark values. On 15 December 2009 and 29 October 2010, letters were again sent to Northstate Recycling requesting review of existing BMP's, modification of current and/or implementation of new BMP's, and submittal of an updated SWPPP.
12. In July 2010, the California Sportfishing Protection Alliance (CSPA) filed a civil lawsuit against Northstate Recycling alleging discharges of pollutants from the Facility were in violation of the Federal Water Pollution Control Act ("Clean Water Act") and the General Permit. Specifically, CSPA filed suit based on the following:
 - a. Discharges of storm water in violation of permit conditions and the Clean Water Act,
 - b. Failure to develop and implement an adequate SWPPP,
 - c. Failure to develop and implement BAT and BCT,
 - d. Failure to develop and implement an adequate Monitoring and Reporting Program,
 - e. False certification of compliance in the Annual Report.
13. In June 2011, CSPA and Northstate Recycling entered into a Consent Agreement to resolve the alleged violations. In the Consent Agreement, Northstate Recycling agreed to the following:
 - a. Implement all measures necessary to comply with the requirements of the General Permit,
 - b. Completion of storm water controls/Best Management Practices:
 - i. Immediately maintain existing sand filtration system in a working order designed to maximize and ensure the effectiveness of the treatment system,
 - ii. Install a second sand filter, which must conform to the attached design specifications,
 - iii. Pave designated area, "Phase I" by 30 September 2011,
 - iv. Pave designated area, "Phase II" by 30 September 2012,
 - v. Complete regenerative sweeping twice a week, every week,
 - vi. Magnetic sweeping three times per day, every business day,

- vii. Inspect the Facility perimeter and construct berms to prevent storm water discharges from any area of the Facility other than the designated outfall.
 - c. Formally amend the Storm Water Pollution Prevention Plan,
 - d. Increase storm water sampling frequency and report sample results to CSPA,
 - e. Meet and confer with CSPA if any results show agreed upon exceedance(s),
 - f. Regular CSPA communication, submittals, and inspections,
 - g. Pay penalties of ninety four thousand, seven hundred twenty-five dollars (\$94,725).
14. In 2011, Northstate Recycling made significant modifications to the existing storm water treatment system (sand filtration unit). The treatment system now consists of a three-chamber concrete-lined storm water detention basin and sand filtration beds. The detention basin is lined with two rows of hay bales off-set from each other to reduce sediment loads into the basin. As the larger primary chamber fills with storm water, it overflows into a smaller secondary chamber, and then into a similarly sized tertiary basin. Absorbent booms are placed on the liquid surface in the chambers to help reduce petroleum discharges through the storm water treatment system. Storm water flows from the third chamber of the sediment detention basin into a concrete lined sand filtration system. Storm water that infiltrates through the sand filter (by gravitational forces) enters perforated pipe, which discharges directly into the unnamed tributary.
15. At times during peak storm events, the system can become inundated. Further, sediment entrained in storm water can significantly reduce infiltration through the sand filter thereby causing the filter to “backup” and overflow, untreated storm water creating “bypass conditions.”
16. In 2010, Northstate Recycling installed a 60-inch by 60-inch American Pulverizer appliance and light metal processor and separation system. This system size reduces appliances and light metal using a hammer mill style processor into small pieces four to six inches in size. Northstate Recycling indicates they remove materials requiring special handling in accordance with state law prior to processing. The system magnetically sorts scrap steel and an Eddy current is used to separate non-magnetic metal items such as aluminum, copper, and brass. All other non-salvageable material including plastic, rubber, and glass are sorted by size into waste streams known as shredder waste fluff and shredder waste fines.

VIOLATIONS OF THE GENERAL INDUSTRIAL STORM WATER PERMIT

17. The *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins*, Fourth Edition, revised October 2011 (the “Basin Plan”) designates beneficial uses, establishes narrative and numerical water quality objectives (WQO), contains implementation plans and policies for protecting all waters of the Basin, and incorporates, by reference, plans and policies of the State Water Board.
18. During January and March 2012, heavy rains overwhelmed Northstate Recycling’s storm water treatment system, which caused the discharge of unfiltered storm water to an unnamed tributary of Clear Creek and thence the Sacramento River. Clear Creek is located approximately 200 feet south of the Site’s storm water treatment system outfall pipe and is important spawning habitat for fall-run Chinook salmon and steelhead. The

confluence of the Sacramento River is located approximately 3,800 feet east of the unnamed tributary.

19. The designated beneficial uses of Clear Creek below Whiskeytown Reservoir as specified in the Basin Plan, are municipal and domestic supply, agricultural supply; water contact and non-contact water recreation; warm and cold fresh water habitat; cold water migration; warm and cold water spawning; and wildlife habitat. These beneficial uses also apply to the unnamed tributary receiving storm water discharge from the facility.

20. On 19 January 2012, 2.08 inches of rain fell in the Redding Area (Department of Water Resources, California Data Exchange Center, Redding Fire Station) after a period of approximately seven weeks with little or no precipitation. On this day, Central Valley Water Board staff collected a sample of storm water discharging from an outfall pipe connected to the storm water treatment system. Results of this sample show many constituents exceeding water quality thresholds. These data are summarized in the table below.

Storm Water Sample at Discharge (D-1) during Filter Bypass

Constituent	Results	US EPA Benchmark	Water Quality Threshold
Total Suspended Solids (mg/L)	2,900	100	100⁷
Turbidity (NTU)	100	--	--
Total Metals (µg/L)			
Aluminum	45,000	750	1,000 ³ /200 ⁶
Antimony	16	--	6 ³
Arsenic	11	--	10 ²
Barium	910	--	100 ⁸
Cadmium	49	--	5 ³
Chromium	180	--	50 ³
Copper	1,600	--	5.83 ²
Iron	99,000	1,000	300 ⁶
Lead	4,000	81	15 ³
Mercury	9.7	--	0.059 ²
Nickel	210	--	100 ³
Vanadium	120	--	50 ⁵
Zinc	13,000	117	16.91 ²
Dissolved Metals (µg/L)			
Copper	28	63	5.6 ⁸
Molybdenum	16	--	10 ⁴
Zinc	20	--	16 ⁸
SVOC's (µg/L)			
Pentachlorophenol	1.3 (J)	--	1 ³
Bis(2-ethylhexyl) phthalate	24	--	1.8 ¹
TPH (µg/L)			
TPHd	4,700	--	56 ⁹
Total Oil & Grease (HEM)	16,000	15,000	15,000⁷

¹ CTR Human Health, Water and Organisms

² Basin Plan dissolved criterion, converted to Total using metals translator

³ California Primary MCL

⁴ Agricultural Water Quality Goal

⁵ DPH California Notification Level

⁶ California Secondary MCL

⁷ US EPA Benchmark Value

⁸ Basin Plan

⁹ US EPA IRIS Reference Dose (RfD) as a drinking water level

¹⁰ National Recommended Water Quality Criteria for Taste & Odor or Welfare

21. The Board's 19 January 2012 inspection indicates that Northstate Recycling is in violation of the General Permit. The General Permit requires (a) that storm water discharges not cause or threaten to cause pollution, contamination, or nuisance; (b) that storm water discharges not cause or contribute to a violation of an applicable water quality standard; and (c) that facility operators reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges through the development and implementation of BMPs which constitutes compliance with BAT and BCT.
22. Discharges from Northstate Recycling violate the following provisions of the General Permit:
 - a. Discharge Prohibition A.2, "Storm water discharges and authorized non-storm water discharges shall not cause or threaten to cause pollution, contamination, or nuisance."
 - b. Effluent Limitation B.3, "Facility operators covered by this General Permit must reduce or prevent pollutants associated with industrial activity in storm water discharges and authorized non-storm water discharges through implementation of BAT for toxic and nonconventional pollutants and BCT for conventional pollutants. Development and implementation of a SWPPP that complies with the requirements in Section A of the General Permit and that includes BMPs that achieve BAT/BCT constitutes compliance with this requirement."
 - c. Receiving Water Limitation C.1, "Storm water discharges and authorized non-storm water discharges to any surface or groundwater shall not adversely impact human health or the environment."
 - d. Receiving Water Limitation C.2, "Storm water discharges and non-storm water discharges shall not cause or contribute to an exceedance of any applicable water quality standards contained in a Statewide Water Quality Control Plan or the applicable Regional Water Board's Basin Plan."
 - e. Section C, Standard Provision 5, Proper Operation and Maintenance, "The facility at all times shall properly operate and maintain any facilities and systems of treatment and control (and related appurtenances) which are installed or used by the facility operator to achieve compliance with the conditions of this General Permit and with the requirements of the storm water pollution prevention plans (SWPPP). Proper operation and maintenance also include adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance may require the operation of backup or auxiliary facilities or similar systems installed by a facility operator when necessary to achieve compliance with the conditions of this General Permit."

IMPROPER STORAGE AND HANDLING OF HAZARDOUS WASTE

23. Chapter 11 of Title 22 of the California Code of Regulations contains regulations pertaining to the "Identification and Listing of Hazardous Waste." These regulations specify that, unless specifically excluded from regulation as a hazardous waste, wastes are to be deemed hazardous if they exhibit one or more of the following characteristics: ignitability, corrosivity, reactivity, or toxicity. (Cal. Code Regs., tit. 22, §§ 66261.20 - 66261.24.)
24. In November 2011, staff of the Shasta County Solid Waste Local Enforcement Agency provided Central Valley Water Board staff a copy of sample results of shredder waste generated by Northstate Recycling that was being disposed at the West Central Class III Municipal Solid Waste Landfill (Landfill) in Shasta County. The results found elevated concentrations of copper and zinc above their respective Total Threshold Limit Concentrations (TTLIC), an indication that the waste may exhibit the characteristic of toxicity.
25. On 9 November 2011, Central Valley Water Board staff collected samples of shredder waste fluff and fines generated by Northstate Recycling that had been disposed at the Landfill. Analytical results of these samples found elevated concentrations of lead and zinc above TTLIC criteria and elevated soluble concentrations of cadmium, lead, and zinc above their respective Soluble Threshold Limit Concentrations (STLC). Split samples collected by the landfill owner found elevated concentrations of chromium, lead, nickel and zinc above TTLIC criteria and elevated soluble concentrations of cadmium, lead, and zinc above STLC criteria. Wastes that exceed TTLIC and/or STLC criteria may exhibit characteristics of toxicity.
26. On 24 January 2012, Central Valley Water Board staff conducted an inspection of the entire Northstate Recycling facility. Facility sorting, processing, and storage operations were evaluated. During the inspection, Central Valley Water Board staff discovered that ash from the facility's former aluminum re-melt furnace had been disposed on-site in a plastic lined pit covered with concrete. A 13 August 2001 letter report from Northstate Recycling's consultant, West Environmental Services & Technology, indicates that this ash contains concentrations of copper, lead, and zinc exceeding their respective TTLIC criteria, and concentrations of soluble lead and copper exceeding their respective STLC criteria.
27. During the 24 January 2012 Site inspection, Central Valley Water Board staff observed shredder waste fluff and shredder waste fines stockpiles on APN 050-500-021-000. Stockpiles were estimated to contain 1,600 cubic yards of shredder waste. Shredder waste stockpiles were in direct contact with pooled storm water. Central Valley Water Board staff collected three discreet samples of the shredder waste fluff and three discreet samples of the shredder waste fines. Results of these samples indicate concentrations of copper, lead, zinc and polychlorinated biphenyls (PCB's) exceed their respective TTLIC criteria and soluble concentrations of cadmium, chromium, lead and

zinc exceed their respective STLC criteria. Representative shredder waste concentrations and associated regulatory thresholds are summarized in the table below.

Shredder Waste Concentrations

Analyte	Shredder Fluff-A	Shredder Fluff-B	Shredder Fluff-C	Shredder Fines-A	Shredder Fines-B	Shredder Fines-C	Threshold
Total Metals (mg/kg)							
Aluminum	17,000	38,000	9,700	13,000	100,000	45,000	--
Total Metals (mg/kg)							TTL
Antimony	24	22	39	30	13	31	500
Arsenic	4.9(J)	6.2(J)	8.6	4.8(J)	6.2(J)	7.8(J)	500
Barium	1,600	1,000	1,300	980	620	1,200	10,000
Beryllium	0.13(J)	0.16(J)	0.13(J)	ND	ND	ND	75
Cadmium	49	30	77	29	40	35	100
Chromium	220	230	160	180	230	560	2,500
Cobalt	34	34	58	30	24	48	8,000
Copper	860	53,000	720	24,000	7,700	2,700	2,500
Iron	56,000	55,000	75,000	59,000	62,000	91,000	--
Lead	1,500	1,000	1,600	950	1,000	1,800	1,000
Magnesium	2,800	2,900	3,700	3,300	3,600	2,900	--
Mercury	5.8	3.6	1.4	5.3	2	2.9	20
Molybdenum	27	34	64	34	33	42	3,500
Nickel	460	260	280	180	190	340	2,000
Selenium	6.6(J)	5.4(J)	4.2(J)	5.9(J)	6.3(J)	6.1(J)	100
Silver	15	6.3(J)	120	6.1(J)	4.9(J)	17	500
Vanadium	14	14	12	8.8(J)	18	15	2,400
Zinc	17,000	18,000	60,000	21,000	13,000	18,000	5,000
Metals – WET Procedure (mg/L)							STLC
Barium	6.2	11	9.1	NA	NA	11	100
Cadmium	1.1	2.6	2.7	1.8	3	2.5	1
Chromium	2.7	4.3	3	4.8	5.9	4.7	5
Copper	2.3	37	5.9	4.9	2.6	0.84	25
Lead	1.6	95	76	60	70	51	5
Mercury	NA	ND	NA	ND	ND	ND	0.2
Nickel	3.5	8.2	4.3	NA	NA	6.6	20
Silver	NA	NA	0.065(J)	NA	NA	NA	5
Zinc	920	1,500	1,700	1,400	1,400	2,200	250
PCB's (mg/kg)							TTL
Arochlor 1016	35	19	ND	11	22	14	50
Arochlor 1254	1.8	3.5	260	1.8	3.8	3.4	50
Total PCB's	36.8	22.5	260	12.8	25.8	17.4	50
SVOC's (mg/kg)							
Bis(2-ethylhexyl) phthalate	1,100	180(J)	ND	96	420(J)	110(J)	--
VOC's (mg/kg)							
Trichloro-fluoromethane	310	20	51	110	84	29	--
TPH (mg/kg)							
TPHd (AJ)	4,200	2,300	3,800	1,600	2,600	1,600	--
TRPH	6,000	2,500	7,100	5,700	12,000	7,300	--
J = Estimate Result below Reporting Limit AJ = Heavier Hydrocarbon Than Diesel TRPH = Total Recoverable Petroleum Hydrocarbons NA = Not Analyzed ND = Not Detected Above Minimum Detection Limit mg/kg & mg/L = Milligrams per Kilogram & Milligrams per Liter (Parts Per Million)							

28. The Water Boards and the Department of Toxic Substances Control share responsibility for the investigation and remediation of Sites affected by hazardous materials, where those materials threaten groundwater or surface waters. The potentially hazardous nature of the shredder waste warrants multi-agency coordination.
29. The Central Valley Water Board will act as lead agency overseeing the investigation and cleanup of this Site; DTSC will assist by providing comments on appropriate draft documents required by this Order, and approval of all formal actions regarding the investigation, characterization, handling, transportation, and disposal practices of shredder waste.

UNPERMITTED DISCHARGES TO GROUNDWATER

30. The Basin Plan contains a narrative WQO for chemical constituents which require, in part, that groundwater not contain chemical constituents in concentrations that adversely affect any beneficial use. The designated beneficial uses of groundwater beneath the Site are municipal and domestic water supply (MUN), agricultural supply (AGR) industrial service supply (IND), and industrial process supply (PRO).
31. For groundwaters that are designated MUN, such as groundwater beneath the Site, the Basin Plan incorporates by reference drinking water maximum contaminant levels ("Mills") promulgated in Chapter 15 of Title 22 of the California Code of Regulations. Furthermore, the Basin Plan also contains narrative groundwater WQOs for tastes and odors and for toxicity. The taste and odor WQO requires that groundwater not contain taste or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses. The toxicity WQO requires, in part, that groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in humans.
32. During the 24 January 2012 Site inspection, Central Valley Water Board staff collected groundwater samples from three monitoring wells, two located directly behind the facility on APN 050-500-015-000, and one located at the northwest corner of the facility near the front gate. Sample results indicate concentrations of aluminum and lead exceed primary MCLs. Iron exceeds the California Secondary MCL; vanadium exceeds the

California Department of Public Health's Notification Level. Representative groundwater data and associated water quality thresholds are summarized in the table below.

Groundwater Data – 24 January 2012

Analyte	MW-4	MW-9	MW-11	Water Quality Threshold
Inorganics				
Specific Conductance (µS/cm)	110	180	120	700 ⁴
pH (Units)	6.4	6.5	6.4	6.5 – 8.5¹¹
TDS (mg/L)	82	130	90	450 ⁴
Turbidity (NTU)	1,100	600	26	--
Total Metals(µg/L)				
Aluminum	24,000	12,000	2,100	1,000³/200⁶
Antimony	0.16 (J)	0.37 (J)	0.099 (J)	6 ³
Arsenic	3.6	4.1	0.080 (J)	10 ³
Barium	320	580	42	1,000 ³
Beryllium	1.2	1.3	ND	4 ³
Cadmium	0.46	0.4	ND	5 ³
Chromium	42	14	5.9	50 ³
Cobalt	17	7.4	1.4	50 ⁴
Copper	50	23	4.7	200 ⁴
Iron	36,000	14,000	3,400	300⁶
Lead	24	30	0.89	15³
Magnesium	17,000	12,000	6,500	--
Mercury	0.25	0.69	ND	2 ³
Molybdenum	0.14 (J)	0.31	0.053 (J)	10 ⁴
Nickel	39	28	4.2	100 ³
Selenium	0.4 (J)	1	0.23 (J)	20 ⁴
Silver	0.86 (J)	2	ND	35 ⁹
Thallium	0.1 (J)	0.33 (J)	ND	2 ³
Vanadium	69	28	8.8	50⁹
Zinc	99	53	8.9	2,000 ⁴
TPH (µg/L)				
TPHd	63 (AJ)	68 (AJ)	54 (AJ)	56⁹
Total Oil & Grease (HEM)	32,000	ND	ND	--
¹ CTR Human Health, Water and Organisms ² Basin Plan dissolved criterion, converted to Total using metals translator ³ California Primary MCL ⁴ Agricultural Water Quality Goal ⁵ DPH California Notification Level ⁶ California Secondary MCL ⁷ US EPA Benchmark Value ⁸ Basin Plan ⁹ US EPA IRIS Reference Dose (RfD) as a drinking water level ¹⁰ National Recommended Water Quality Criteria for Taste & Odor or Welfare ¹¹ US EPA Secondary MCL				

DISCHARGER LIABILITY AND RELEVANT POLICIES

33. The State Water Board has adopted Resolution No. 92-49, *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges under Water Code Section 13304* ("Resolution 92-49"). Resolution 92-49 sets forth the policies and procedures to be used during an investigation and cleanup of a polluted site, and requires that cleanup levels be consistent with State Water Board Resolution 68-16, the *Statement of Policy with Respect to Maintaining High Quality Waters in California* ("Resolution 68-16"). Resolution 92-49 requires the waste to be cleaned up in a manner that promotes attainment of either background water quality, or the best water quality which is reasonable if background levels of water quality cannot be restored. Any alternative cleanup level to background must: (1) be consistent with the maximum benefit to the people of the state; (2) not unreasonably affect present and anticipated beneficial use of such water; and (3) not result in water quality less than that prescribed in the Basin Plan and applicable Water Quality Control Plans and Policies of the State Water Board. Resolution 92-49 directs that investigations proceed in a progressive sequence. To the extent practical, it directs the Central Valley Water Board to require and review for adequacy written work plans for each element and phase, and the written reports that describe the results of each phase of the investigation and cleanup.
34. Chapter IV of the Basin Plan contains the *Policy for Investigation and Cleanup of Contaminated Sites*, which sets forth the Central Valley Water Board's policy for managing contaminated sites. The policy strategy generally outlines a process that includes site investigation, source removal or containment, information required to be submitted for consideration in establishing cleanup levels, and the basis for establishment of soil and groundwater cleanup levels.
35. The constituents listed in Findings Nos. 20, 24, 25, 26, 27, and 32 are "wastes," as defined in Water Code section 13050(d). As described in the above Findings, many surface water and groundwater analytes exceed levels that implement water quality objectives. Exceeding applicable water quality objectives is indicative of impairment to the beneficial uses of the surface water and groundwater, and thereby constitutes pollution as defined in Water Code section 13050(l)(1).
36. The wastes detected at the Site are not naturally occurring, and some are known human carcinogens. Further, some are confirmed to exhibit characteristics of toxicity. These wastes threaten human health and impair or threaten to impair the beneficial uses of surface and groundwater.
37. Chapter IV of the Basin Plan contains the Policy for Application of Water Quality Objectives, which provides that "where compliance with narrative objectives is required (i.e., where the objectives are applicable to protect specified beneficial uses), the Central Valley Water Board will, on a case-by-case basis, adopt numerical limitations in orders which will implement the narrative objectives." Sample results have identified a number of constituents that are not present in groundwater unaffected by the discharge and that could exceed a narrative WQO. All of these are constituents of concern. The numerical

limits for the constituents of concern listed in the following table implement the Basin Plan WQOs.

Basin Plan Water Quality Objectives

Constituent	Limits	WQO	Reference
pH	6.5-8.5	Taste and Odor	USEPA Secondary MCL
Aluminum	1,000	Toxicity	California Primary MCL (CDPH)
	200	Taste and Odor	California Secondary MCL (CDPH)
Iron	300	Taste and Odor	California Secondary MCL (CDPH)
Lead	15	Toxicity	California Primary MCL (CDPH)
Vanadium	50	Toxicity	California Notification Level (CDPH)
Total Petroleum Hydrocarbons as Diesel	56	Toxicity	USEPA IRIS Reference Dose (RfD)

38. Water Code section 13304(c)(1) provides that:

Any person who has discharged or discharges waste into waters of the state in violation of any waste discharge requirements or other order or prohibition issued by a regional board or the state Board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the Regional Water Board clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including but not limited to, overseeing cleanup and abatement efforts.

Untreated storm water from property owned or operated by the Dischargers has discharged, and still has the potential to discharge, sediment, metals, petroleum compounds, and other wastes into an unnamed tributary to Clear Creek and thence Clear Creek. In addition, groundwater sampling conducted at the Site provides evidence that Site operations have impacted groundwater. Therefore, the Board finds that the Dischargers have discharged waste into waters of the state in violation of waste discharge requirements (the General Permit), and have also caused or permitted waste to be discharged or deposited where has been, and probably will be, discharged to waters of the state, creating or threatening to create a condition of pollution or nuisance. The condition of pollution is a priority violation and the issuance of a cleanup and abatement order pursuant to Water Code section 13304 is appropriate and consistent with policies of the Central Valley Water Board.

39. Water Code section 13267(b)(1) provides that:

... the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region ... shall furnish, under penalty of perjury, technical or monitoring program reports which the Regional Water Board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports.

Existing data and information about the Site indicates that wastes have been discharged and will continue to be discharged from properties owned or operated by the

Dischargers. The technical reports required by this Order are necessary to assure compliance with this Order, and to protect human health and the environment.

40. Water Code section 13304(c)(1) provides that:

If waste is cleaned up or the effects of the waste are abated, or, in the case of threatened pollution or nuisance, other necessary remedial action is taken by any government agency, the person or persons who discharged the waste, discharges the waste, or threatened to cause or permit the discharge of the waste within the meaning of subdivision (a), are liable to that government agency to the extent of the reasonable costs actually incurred in cleaning up the waste, abating the effects of the waste, supervising cleanup or abatement activities, or taking other remedial actions...

41. This Order requires investigation and cleanup of the Site in compliance with the Water Code, the Basin Plan, Resolution 92-49, and other applicable Central Valley Water Board plans, policies, and regulations.

42. The issuance of this Order is an enforcement action taken by a regulatory agency and is exempt from the provisions of the California Environmental Quality Act ("CEQA") Public Resources Code section 21000 et seq., in accordance with California Code of Regulations, title 14, section 15321(a)(2). The issuance of this Order is also an action to assure the restoration of the environment and is exempt from the provisions of CEQA in accordance with California Code of Regulations, title 14, sections 15308 and 15330.

REQUIRED ACTIONS

IT IS HEREBY ORDERED that, pursuant to Water Code sections 13304 and 13267, Northstate Recycling Inc., Clear Water Properties, LLC, R & L Auto Crushing, and William and Lena Short shall cleanup and abate the impacts to water quality in accordance with the scope and schedule set forth below.

1. Investigate the discharges of waste, clean up the waste, and abate the effects of the waste, forthwith, resulting from activities at the Site, in conformance with State Water Resources Control Board Resolution 92-49 *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304* and with the Central Valley Water Board's Basin Plan. "Forthwith" means as soon as is reasonably possible. Compliance with this requirement shall include, but not be limited to, completing the tasks listed below.
2. **By 12 May 2012**, the Dischargers shall provide a Preliminary Endangerment Assessment (PEA) Work Plan, formatted in accordance with California Health and Safety Code (CHSC), Division 20, Chapter 6.8, section 25319.5. The PEA Work Plan shall include, but not be limited to, proposals to investigate possible soil and groundwater pollution associated with scrap metal storage and processing, shredder waste handling and storage, unlawful disposal of aluminum ash, processing and storage of "materials that require special handling" in accordance with CHSC, Division 20,

Chapter 6.8, section 25212, impacts from discharges of storm water to sediment and aquatic organisms in the unnamed tributary to Clear Creek and Clear Creek itself, impacts to soil and groundwater from use of fuels, oils, and/or solvents, and risk assessment for populations surrounding the Site from airborne particulate matter generated on-site.

3. **By 1 June 2012**, the Dischargers shall provide a Shredder Waste Operations and Management Plan for the Site. The Shredder Waste Operations and Management Plan shall include, but not be limited to, information regarding shredder waste handling, storage and timeframes, characterization, hauling, and ultimate disposal. Any necessary upgrades to shredder waste handling procedures shall be implemented immediately upon Central Valley Water Board staff approval of the plan.
4. **By 1 June 2012**, the Dischargers shall provide a Design and Operations Plan for upgrading the storm water treatment system so that storm water discharges comply with the General Industrial Storm Water Permit and applicable water quality objectives.
5. **By 29 June 2012**, the Dischargers shall complete disposal of existing shredder waste stockpiles and provide a Summary Shredder Waste Disposal Report, including waste manifests and disposal receipts.
6. **By 31 August 2012**, the Dischargers shall provide the Preliminary Endangerment Assessment Report with findings, results, and if appropriate, proposals for a Feasibility Study and/or a Remedial Action Plan.
7. **By 1 October 2012**, the Dischargers shall complete installation of any necessary upgrades to the Site storm water treatment system in accordance with an approved Design and Operations Plan. Additionally, the Dischargers shall provide an updated Storm Water Pollution Prevention Plan.
8. **By 15 October 2012**, the Dischargers shall complete any necessary upgrades to Site infrastructure, based on an approved Shredder Waste Operations and Management Plan.
9. **By 1 November 2012**, the Dischargers shall provide an updated Spill Prevention Control and Countermeasure Plan, prepared and certified by a California licensed professional engineer, in accordance with the California Aboveground Petroleum Storage Act and U.S. Code of Federal Regulations, title 40, part 112.
10. **By 15 November 2012**, the Dischargers shall provide a Feasibility Study and/or Remedial Action Plan, if appropriate.
11. **By 1 April 2013**, the Dischargers shall implement approved Remedial Alternatives, if appropriate.

12. **By 15 October 2013**, the Dischargers shall complete disposal of ash from the aluminum re-melt furnace and provide a Summary Aluminum Ash Disposal Report, including waste manifests and disposal receipts.

GENERAL REQUIREMENTS

13. As required by the California Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. All technical reports submitted by the Discharger shall include a cover letter signed by the Discharger, or an authorized representative, certifying under penalty of law that the signer has examined and is familiar with the report and that to their knowledge, the report is true, complete, and accurate. The Discharger shall also state if it agrees with any recommendations/proposals and whether it approves implementation of said proposals.
14. Any person signing a document submitted under this Order shall make the following certification: *"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my knowledge and on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."*
15. Northstate Recycling shall notify Board staff at least 48 hours prior to any onsite work, testing, or sampling that pertains to environmental remediation and investigation and is not routine monitoring, maintenance, or inspection.
16. Northstate Recycling shall obtain all applicable local, state, and federal permits necessary to fulfill the requirements of this Order prior to beginning the work.
17. Continue any remediation or monitoring activities until such time as the Executive Officer determines that sufficient cleanup has been accomplished to fully comply with this Order and this Order has been either amended or rescinded in writing.
18. Northstate Recycling shall submit all written reports and analytical results to the Central Valley Water Board and electronic copies of all reports and analytical results over the Internet to the State Water Board Geographic Environmental Information Management System database (GeoTracker) at <http://geotracker.swrcb.ca.gov>. Electronic submittals shall comply with GeoTracker standards and procedures as specified on the State Board's web site.
19. Northstate shall enroll in the State Water Board's Cost Recovery Program.

If for any reason, Northstate Recycling is unable to perform any activity or submit any document in compliance with the schedule set forth herein, or is unable to comply with any work schedule submitted pursuant to this Order, it may request, in writing, an extension of the time specified.

The extension request shall include justification for the delay. Any extension request shall be submitted as soon as the situation is recognized and no later than the compliance date. An extension may be granted by revision of this Order or by a letter from the Executive Officer. Extension requests not approved in writing by the Executive Officer with reference to this Order are denied.

If in the opinion of the Executive Officer, Northstate Recycling fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement or may issue a complaint for administrative civil liability. Failure to comply with this Order may result in the assessment of an Administrative Civil Liability of up to \$10,000 per violation per day pursuant to Water Code sections 13268, 13350, and/or 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

This Order is effective upon the date of signature.

Original signed by

ROBERT A. CRANDALL, Assistant Executive Officer

25 April 2012

Date

Central Valley Regional Water Quality Control Board

25 April 2012

CERTIFIED MAIL
7009 2250 0002 9885 2890

Mr. William Short
Northstate Recycling
2041 Girvan Road
Redding, CA 96001

CLEANUP AND ABATEMENT ORDER NO. R5-2012-0706, NORTHSTATE RECYCLING, A CALIFORNIA CORPORATION; CLEAR WATER PROPERTIES, LLC; R & L AUTO CRUSHING; AND WILLIAM AND LENA SHORT, SHASTA COUNTY

Enclosed is a copy of Cleanup & Abatement Order R5-2012-0706 (CAO) for Northstate Recycling, a California Corporation; Clear Water Properties, LLC; R&L Auto Crushing; and William and Lena Short (hereafter collectively Dischargers) issued by the Assistant Executive Officer of the Central Valley Regional Water Quality Control Board (Water Board). The CAO directs the Dischargers to characterize and properly dispose of shredder fluff and fines, prevent the untreated discharge of storm water, and conduct studies to fully evaluate potential impacts to the environment. The CAO specifically requires that the Dischargers:

- **By 12 May 2012**, provide a Preliminary Endangerment Assessment (PEA) Work Plan proposing to investigate possible soil and groundwater pollution associated with scrap metal storage and processing, shredder waste handling and storage, unlawful disposal of aluminum ash, processing and storage of "materials that require special handling," impacts from discharges of storm water to sediment and aquatic organisms in the unnamed tributary to Clear Creek and Clear Creek itself, impacts to soil and groundwater from use of fuels, oil, and/or solvents, and risk assessment for populations surrounding the Site from airborne particulate matter originating from the Site.
- **By 1 June 2012**, provide a Shredder Waste Operations and Management Plan.
- **By 1 June 2012**, provide a Design and Operations Plan for upgrading the storm water treatment system.
- **By 29 June 2012**, complete disposal of existing shredder waste stockpiles stored at the Site and provide a Summary Shredder Waste Disposal Report.
- **By 31 August 2012**, provide the Preliminary Endangerment Assessment Report with findings, results, and if appropriate, proposals for a Feasibility Study and/or Remedial Action Plan.
- **By 1 October 2012**, complete installation of any necessary upgrades to the Site storm water treatment system in accordance with an approved Design and Operations Plan, and provide an updated Storm Water Pollution Prevention Plan.

- **By 15 October 2012**, complete any necessary upgrades to Site infrastructure, based on an approved Shredder Waste Operations and Management Plan.
- **By 1 November 2012**, provide an updated Spill Prevention Control and Countermeasure Plan.
- **By 15 November 2012**, provide a Feasibility Study and/or Remedial Action Plan, if appropriate.
- **By 1 April 2013**, implement approved Remedial Alternatives, if appropriate.
- **By 15 October 2013**, complete disposal of ash from the aluminum re-melt furnace and provide a Summary Aluminum Ash Disposal Report.

Failure to comply with this Order may result in the assessment of an Administrative Civil Liability of up to ten thousand dollars (\$10,000) per violation per day pursuant to Water Code sections 13268, 13350, and/or 13385. In addition, the Water Board may seek injunctive relief by authorizing the Attorney General to petition the Superior Court for an injunction requiring compliance with the Order. The Court may grant a prohibitory injunction stopping all activities until compliance is achieved.

In order to conserve paper and postage, paper copies of this Order are only being provided to the Dischargers. Electronic copies are available on the Central Valley Water Board's website at http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/index.shtml. Those without internet access can request a copy by contacting Central Valley Water Board staff. If you have any questions, please contact Clint Snyder or George Day of my staff at (530) 224-4845 or the footer address.

ROBERT A. CRANDALL
Assistant Executive Officer

Enclosure: Cleanup and Abatement Order No. R5-2012-0706 (addressee only)

cc: Central Valley Regional Water Quality Control Board , Regional Board Members,
Rancho Cordova
Cris Carrigan, State Water Board's Office of Enforcement, Sacramento
Patrick Pulupa, State Water Resources Control Board, Sacramento
Peter Wood, DTSC, Sacramento
Jane Vorpagel, DFG Region 1, Redding
Jay Cross, California District Attorneys Association, Sacramento
Carla Serio, Shasta County Environmental Health Division, Redding
Robert Roat, WSP Environment & Energy, San Jose
Bill Jennings, California Sportfishing Protection Alliance
Erik Roper, The Law Offices of Andrew Packard, Petaluma